0370

OIPE

RAW SEQUENCE LISTING DATE: 12/20/2001 PATENT APPLICATION: US/09/771,383 TIME: 14:15:05

Input Set : A:\2368-12.ST25.txt

```
ENTERED
 3 <110> APPLICANT: Parris, Kevin
        Somers, William
        Tam, Amy
        Lin, Laura
        Stahl, Mark
9 <120> TITLE OF INVENTION: CRYSTAL STRUCTURE OF ACYL CARRIER PROTEIN SYNTHASE
10 AND ACYL CARRIER PROTEIN SYNTHASE COMPLEX
12 <130> FILE REFERENCE: 2368/12
14 <140> CURRENT APPLICATION NUMBER: US 09/771,383
16 <141> CURRENT FILING DATE: 2001-01-25
18 <150> PRIOR APPLICATION NUMBER: US 60/178,639
20 <151> PRIOR FILING DATE: 2000-01-28
22 <160> NUMBER OF SEQ ID NOS: 13
24 <170> SOFTWARE: PatentIn version 3.0
26 <210> SEQ ID NO: 1
28 <211> LENGTH: 121
30 <212> TYPE: PRT
32 <213> ORGANISM: B. subtilis
34 <400> SEQUENCE: 1
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39 Ser Met Ala Gly Arg Gln Lys Arg Phe Ala Glu Arg Ile Leu Thr Arg
                                  25
42 Ser Glu Leu Asp Gln Tyr Tyr Glu Leu Ser Glu Lys Arg Lys Asn Glu
43 35
                              40
45 Phe Leu Ala Gly Arg Phe Ala Ala Lys Glu Ala Phe Ser Lys Ala Phe
48 Gly Thr Gly Ile Gly Arg Gln Leu Ser Phe Gln Asp Ile Glu Ile Arg
51 Lys Asp Gln Asn Gly Lys Pro Tyr Ile Ile Cys Thr Lys Leu Ser Gln
                 85
                                      90
54 Ala Ala Val His Val Ser Ile Thr His Thr Lys Glu Tyr Ala Ala Ala
           100
                                  105
57 Gln Val Val Ile Glu Arg Leu Ser Ser
    115
61 <210> SEQ ID NO: 2
63 <211> LENGTH: 122
65 <212> TYPE: PRT
67 <213> ORGANISM: Aquifex
69 <400> SEQUENCE: 2
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74 Glu Arg Phe Gly Asp Lys Phe Leu Asp Arg Ile Tyr Thr Lys Arg Glu
                                  25
77 Leu Glu Tyr Cys Tyr Ala His Cys Asp Phe Leu Pro Cys Leu Ala Ala
          35
                              40
80 Arg Trp Ala Gly Lys Glu Ala Val Leu Lys Ala Phe Tyr Thr Glu Phe
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RAW SEQUENCE LISTINGPATENT APPLICATION: US/09/771,383

DATE: 12/20/2001
TIME: 14:15:05

Input Set : A:\2368-12.ST25.txt

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55
83 Lys Ile Phe Leu Arg Phe Lys Glu Ile Glu Ile Leu Gly Asn Arg Gly
86 Arg Pro Pro Thr Val Val Ile Asn Arg Glu Gly Val Glu Glu Ile Leu
                 85
                                     90
89 Lys Asn Tyr Glu Val Ile Val Ser Leu Ser His Glu Arg Asp Tyr Ser
90 100
                           105
92 Val Ala Val Ala Tyr Ile Lys Lys Ser
93 115
96 <210> SEQ ID NO: 3
98 <211> LENGTH: 122
100 <212> TYPE: PRT
102 <213> ORGANISM: Chlamydophila
104 <400> SEQUENCE: 3
106 Met Glu Ile Ile His Ile Gly Thr Asp Ile Ile Glu Ile Ser Arg Ile
                                      10
                  5
109 Arg Glu Ala Ile Ala Thr His Gly Asn Arg Leu Leu Asn Arg Ile Phe
     20
                                  25
112 Thr Glu Ala Glu Gln Lys Tyr Cys Leu Glu Lys Thr Asp Pro Ile Pro
                              40
115 Ser Phe Ala Gly Arg Phe Ala Gly Lys Glu Ala Val Ala Lys Ala Leu
                          55
                                              60
118 Gly Thr Gly Ile Gly Ser Val Val Ala Trp Lys Asp Ile Glu Val Phe
                     70
                                          75
121 Lys Val Ser His Gly Pro Glu Val Leu Pro Ser His Val Tyr Ala
                  85
                                     90
124 Lys Ile Gly Ile Ser Lys Val Ile Leu Ser Ile Ser His Cys Lys Glu
             100
                                 105
127 Tyr Ala Thr Ala Thr Ala Ile Ala Leu Ala
         115
131 <210> SEQ ID NO: 4
133 <211> LENGTH: 119
135 <212> TYPE: PRT
137 <213> ORGANISM: Helicobacter
139 <400> SEQUENCE: 4
141 Met Ile Gly Ile Asp Ile Val Ser Ile Ala Arg Ile Glu Lys Cys Val
                                      10
144 Lys Arg Phe Lys Met Lys Phe Leu Glu Arg Phe Leu Ser Pro Ser Glu
               20
                                  25
147 Ile Val Leu Cys Lys Asp Lys Ser Ser Ser Ile Ala Gly Phe Phe Ala
150 Leu Lys Glu Ala Cys Ser Lys Ala Leu Gln Val Gly Ile Gly Lys Glu
                           55
153 Leu Ser Phe Leu Asp Ile Lys Ile Ser Lys Ser Pro Lys Asn Ala Pro
                       70
156 Leu Ile Thr Leu Ser Lys Glu Lys Met Asp Tyr Phe Asn Ile Gln Ser
159 Leu Ser Ala Ser Ile Ser His Asp Ala Gly Phe Ala Ile Ala Val Val
               100
                                  105
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RAW SEQUENCE LISTINGPATENT APPLICATION: US/09/771,383

DATE: 12/20/2001
TIME: 14:15:05

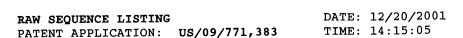
Input Set : A:\2368-12.ST25.txt

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163
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170 <212> TYPE: PRT
172 <213> ORGANISM: Staphylococcus
174 <400> SEQUENCE: 5
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179 Ala Leu Tyr Ser Lys Gln Pro Lys Leu Val Glu Arg Ile Leu Thr Lys
               20
                                   25
182 Asn Glu Gln His Lys Phe Asn Asn Phe Thr His Glu Gln Arg Lys Ile
                               40
185 Glu Phe Leu Ala Gly Arg Phe Ala Thr Lys Glu Ala Phe Ser Lys Ala
                           55
188 Leu Gly Thr Gly Leu Gly Lys His Val Ala Phe Asn Asp Ile Asp Cys
                       70
                                           75
191 Tyr Asn Asp Glu Leu Gly Lys Pro Lys Ile Asp Tyr Glu Gly Phe Ile
                  85
                                      90
194 Val His Val Ser Ile Ser His Thr Glu His Tyr Ala Met Ser Gln Val
              100
                                   105
197 Val Leu Glu Lys Ser Ala Phe
      115
201 <210> SEQ ID NO: 6
203 <211> LENGTH: 169
205 <212> TYPE: PRT
207 <213> ORGANISM: Thermotoga
209 <400> SEQUENCE: 6
211 Met Ile Val Gly Val Gly Ile Asp Val Leu Glu Val Glu Arg Val Pro
                                       10
214 Glu Lys Phe Ala Glu Arg Ile Leu Gly Glu Ser Glu Lys Arg Leu Phe
     20
                                   25
217 Leu Thr Arg Lys Arg Arg Glu Phe Ile Ala Gly Arg Phe Ala Leu
                               40
220 Lys Glu Ala Phe Phe Lys Ala Leu Gly Thr Gly Leu Asn Gly His Ser
                           55
223 Phe Thr Asp Val Glu Phe Leu Glu Ser Asn Gly Lys Pro Val Leu Cys
                                           75
                       70
226 Val His Lys Asp Phe Gly Phe Phe Asn Tyr Ala His Val Ser Leu Ser
                   85
                                       90
229 His Asp Arg Phe Ala Val Ala Leu Val Val Leu Glu Lys Arg Lys Gly
                                   105
232 Asp Ile Ile Val Glu Gly Asp Glu Ser Phe Leu Arg Lys Arg Phe Glu
                               120
235 Val Leu Glu Arg Ser Val Glu Gly Trp Glu Ile Glu Thr Ser Leu Pro
                           135
                                               140
238 Pro Phe Thr Leu Lys Lys Leu Leu Glu Ser Ser Gly Cys Arg Leu Val
                       150
241 Arg Tyr Gly Asn Ile Leu Ile Gly Glu
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RAW SEQUENCE LISTING DATE: 12/20/2001
PATENT APPLICATION: US/09/771,383 TIME: 14:15:05

Input Set : A:\2368-12.ST25.txt

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245 <210> SEQ ID NO: 7
247 <211> LENGTH: 126
249 <212> TYPE: PRT
251 <213> ORGANISM: Escherichia
253 <400> SEQUENCE: 7
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258 Glu Ala Val Ile Ala Arg Ser Gly Asp Arg Leu Ala Arg Arg Val Leu
                20
261 Ser Asp Asn Glu Trp Ala Ile Trp Lys Thr His His Gln Pro Val Arg
                                40
           35
264 Phe Leu Ala Lys Arg Phe Ala Val Lys Glu Ala Ala Lys Ala Phe
                            55
267 Gly Thr Gly Ile Arg Asn Gly Leu Ala Phe Asn Gln Phe Glu Val Phe
                        70
270 Asn Asp Glu Leu Gly Lys Pro Arg Leu Arg Leu Trp Gly Glu Ala Leu
                    85
                                        90
273 Lys Leu Ala Glu Lys Leu Gly Val Ala Asn Met His Val Thr Leu Ala
                                                        110
                                   105
                100
274
276 Asp Glu Arg His Tyr Ala Cys Ala Thr Val Ile Ile Glu Ser
                                120
           115
280 <210> SEQ ID NO: 8
282 <211> LENGTH: 126
284 <212> TYPE: PRT
286 <213> ORGANISM: Rickettsia
288 <400> SEQUENCE: 8
290 Met Leu Ile Gly Val Gly Thr Asp Ile Val Gln Ile Pro Arg Ile Glu
291 1
293 Lys Ile Leu Asn Ile Tyr Gln Glu Leu Phe Ala Lys Lys Ile Leu Ala
296 Leu Lys Glu Leu Lys Gln Phe Thr Leu Leu Asn Lys Thr Asn His Ala
299 Thr Phe Leu Ala Lys Arg Phe Ser Ala Lys Glu Ala Val Ser Lys Ala
302 Phe Gly Val Gly Ile Gly Arg Gly Ile Asn Phe Lys Asp Ile Thr Ile
                                            75
                        70
305 Leu Asn Asp Asn Leu Gly Lys Pro Thr Val Glu Ile Ser Ser His Tyr
308 Thr Asn Lys Leu Ala Pro Phe Asn Ile His Leu Ser Leu Ser Asp Asp
                                    105
                100
311 Tyr Pro Ile Cys Ile Ala Phe Ala Ile Ile Glu Ser Asn Cys
      115
315 <210> SEQ ID NO: 9
317 <211> LENGTH: 123
319 <212> TYPE: PRT
321 <213> ORGANISM: Streptomyces
323 <400> SEQUENCE: 9
326 Met Ser Ile Ile Gly Val Gly Ile Asp Val Ala Glu Val Glu Arg Phe
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Input Set : A:\2368-12.ST25.txt

```
329 Gly Ala Ala Leu Glu Arg Thr Pro Ala Leu Ala Gly Arg Leu Phe Leu
                                   25
               20
332 Glu Ser Glu Leu Leu Pro Gly Gly Glu Arg Arg Gly Val Ala Ser
                               40
335 Leu Ala Ala Arg Phe Ala Ala Lys Glu Ala Leu Ala Lys Ala Leu Gly
                           55
338 Ala Pro Ala Gly Leu Leu Trp Thr Asp Ala Glu Val Trp Val Glu Ala
                       70
341 Gly Gly Arg Pro Arg Leu Arg Val Thr Gly Thr Val Ala Ala Arg Ala
                                       90
344 Ala Glu Leu Gly Val Ala Ser Trp His Val Ser Leu Ser His Asp Ala
    100
                                   105
347 Gly Ile Ala Ser Ala Val Val Ile Ala Glu Gly
                                120
       115
348
351 <210> SEQ ID NO: 10
353 <211> LENGTH: 125
355 <212> TYPE: PRT
357 <213> ORGANISM: Treponema
359 <400> SEQUENCE: 10
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                                        10
364 Ser Trp Thr His Asn Val Arg Leu Leu Arg Arg Phe Phe His Gln Glu
              20
                                    2.5
367 Glu Ile Val Asp Phe Phe Lys Asn His Met Arg Ala Gln Phe Leu Ala
                                40
370 Thr Arg Phe Ala Ala Lys Glu Ala Phe Gly Lys Ala Leu Gly Thr Gly
                            55
373 Leu Arg Asn Met Glu Leu Arg Asn Ile Arg Val Cys Gln Asn Gly Trp
                        70
                                            75
376 Gly Lys Pro Arg Leu Glu Val Tyr Gly Ala Ala Gln Ala Met Leu Ala
                                        90
                    85
379 Ala Thr Gly Gly Thr His Ile Gln Val Ser Leu Thr His Glu Arg Glu
                                    105
               100
382 Val Ala Ser Ala Ile Val Ile Ile Glu Gly Glu Pro Leu
                                120
383
            115
386 <210> SEQ ID NO: 11
388 <211> LENGTH: 121
390 <212> TYPE: PRT
392 <213> ORGANISM: Bacillus
394 <400> SEQUENCE: 11
396 Met Ile Tyr Gly Ile Gly Leu Asp Ile Thr Glu Leu Lys Arg Ile Ala
399 Ser Met Ala Gly Arg Gln Lys Arg Phe Ala Glu Arg Ile Leu Thr Arg
                                    25
402 Ser Glu Leu Asp Gln Tyr Tyr Glu Leu Ser Glu Lys Arg Lys Asn Glu
405 Phe Leu Ala Gly Arg Phe Ala Ala Lys Glu Ala Phe Ser Lys Ala Phe
406
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VERIFICATION SUMMARY

DATE: 12/20/2001 TIME: 14:15:06

PATENT APPLICATION: US/09/771,383

Input Set : A:\2368-12.ST25.txt